

Direct Testimony of Debra M. ~~Berry~~  
and Carlo Michael Peduto, II  
on behalf of Verizon Pennsylvania Inc.  
Pa PUC Docket No. I-00030099  
October 31, 2003

1 Q. HOW SHOULD THE COMMISSION DIFFERENTIATE BETWEEN  
2 MASS MARKET CUSTOMERS AND DS1 ENTERPRISE CUSTOMERS  
3 IN PENNSYLVANIA?

4 A. According to the FCC, "DS1 enterprise customers are characterized by relatively  
5 intense, often data-centric, demand for telecommunications service sufficient to  
6 justify service via high-capacity loops at the DS1 capacity and above." TRO ¶ 451.  
7 Therefore, for the purposes of its impairment analysis, DS1 enterprise customers are  
8 "those customers for which it is economically feasible for a competing carrier to  
9 provide voice service with its own switch using a DS1 or above loop." TRO ¶ 451  
10 n. 1376.

11

12 Mass market customers, on the other hand, "are analog voice customers that  
13 purchase only a limited number of POTS lines, and can only be economically  
14 served via DS0 loops." TRO ¶ 497. "Mass market" refers not only to residential  
15 customers, but also to business customers that do not use DS1 capacity facilities.  
16 The FCC recognized that, "[a]t some point, customers taking a sufficient number  
17 of multiple DS0 loops could be served in a manner similar to that described above  
18 for enterprise customers – that is, voice services provided over one or several  
19 DS1s, including the same variety and quality of services and customer care that  
20 enterprise customers receive." TRO ¶ 497. However, the FCC left it to the states  
21 to determine where the cutoff point should be between mass market and enterprise

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1 customers, which “may be the point where it makes economic sense for a multi-  
2 line customer to be served via a DS1 loop.” *Id.*

3  
4 At its simplest, this “cutoff” should be between customers actually being served  
5 with one or more voice grade DS0 circuits and customers actually being served by  
6 DS1 loops. It is the objective behavior of the CLEC that should drive the  
7 determination of whether or not it “makes economic sense” for that CLEC to  
8 serve particular customers over DS1 loops, rather than over multiple voice grade  
9 DS0 lines. If a CLEC is currently serving a customer using DS0 loops –  
10 regardless of how many – it has already made the determination on its own that it  
11 is most economical to serve the customer as a mass-market customer, rather than  
12 as a DS1 enterprise customer. In other words, if it made “economic sense” to  
13 serve the customer over a DS1, then the CLEC would, in fact, be doing so. This  
14 objective test is more reliable, and grounded in the realities of the marketplace,  
15 than an arbitrary “cutoff” at a particular number of lines, regardless of whether the  
16 customer is actually being served as a DS1 customer. Indeed, AT&T has argued  
17 that the FCC should define mass market customers as “any customer location that  
18 a CLEC serves with voice-grade loops.” Comments of AT&T Corp. at 204-205,  
19 *Review of the Section 251 Unbundling Obligations of Incumbent Local Exchange*  
20 *Carriers*, WC Docket No. 01-338 (FCC filed Apr. 5, 2003). Moreover, other  
21 CLECs have argued for a crossover point as high as 18 lines or more, claiming,

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1 for example, that a lower cut-off for mass market customers “does not reflect the  
2 real-world economics of serving a customer through self-provisioned switching,  
3 and should be changed [to 18 lines] to reflect those economic realities.”  
4 Comments of Z-Tel Communications Inc., *Review of the Section 251 Unbundling*  
5 *Obligations of Incumbent Local Exchange Carriers*, WC Docket No. 01-338  
6 (FCC filed Apr. 5, 2003), at 50-51 (emphasis added).

7  
8 Therefore, based on the CLECs own representations, the mass market “cut-off”  
9 should reflect the economic realities of serving real world customers – as reflected  
10 by the CLECs’ marketplace choice between deploying DS0 loops or DS1 loops to  
11 particular customer locations. If the CLEC has made the economic decision to  
12 treat the customer as a mass market customer and to serve the customer location  
13 using voice-grade loops, then the DS0 lines at that customer location should be  
14 counted as such for the purposes of the switching impairment analysis.

15  
16 **B. Evidence Of Actual Deployment In Pennsylvania**  
17

18 **Q. HAS THERE BEEN SUBSTANTIAL DEPLOYMENT OF CLEC-OWNED**  
19 **SWITCHES IN PENNSYLVANIA?**

20 **A.** Most definitely. The record of competitive switch deployment in Pennsylvania  
21 establishes that competitors are already serving customers of all kinds using their  
22 own switches on a widespread basis throughout the Commonwealth. Competing  
23 carriers operate at least 54 *known* local circuit switches that are physically located

*Comments of the PACE Coalition, et al.*  
October 4, 2004

## **EXHIBIT 23**

SPRINT-FLORIDA/SPRINT COMMUNICATIONS LP  
DOCKET NO. 030851-TP  
FILED: December 4, 2003

**BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION**

**DIRECT TESTIMONY**

**OF**

**KENT W. DICKERSON**

**Q. Please state your name, business address, employer and current position.**

**A. My name is Kent W. Dickerson. My business address is 6450 Sprint Parkway, Overland Park, KS 66251. I am employed as Director - Cost Support for Sprint/United Management Company.**

**Q. Please summarize your qualifications and work experience.**

**A. I received a Bachelor of Science degree from the University of Missouri - Kansas City in 1981 with a major in Accounting. In 1984, I passed the national exam and am a Certified Public Accountant in the State of Missouri.**

**From 1981 to 1983, I was employed as a Corporate Income Tax Auditor II for the Missouri Department of Revenue. From 1983 to 1985, I worked for Kansas Power and Light (now Western Resources) in the Tax and Internal Audit areas. I joined United Telephone Midwest Group in September, 1985 as a Staff Accountant in the Carrier Access Billing area. Thereafter, I moved through a progression of positions within the Toll Administration and General Accounting areas of the Finance Department.**

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SPRINT-FLORIDA/SPRINT COMMUNICATIONS LP  
DOCKET NO. 030851-TP  
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1 In 1987, I was promoted into the Carrier and Regulatory Services group as a  
2 Separations/ Settlement Administrator performing Federal and Intrastate  
3 access/toll pool settlement, reporting and revenue budgeting functions. I was  
4 promoted to Manager - Pricing in June, 1989 where I performed FCC regulatory  
5 reporting and filing functions related to the United Telephone - Midwest Group  
6 Interstate Access revenue streams. In 1991, I was promoted to Senior Manager -  
7 Revenue Planning for United Telephone - Midwest Group. While serving in this  
8 position, my responsibilities consisted of numerous FCC regulatory reporting and  
9 costing functions. In 1994, I accepted a position within the Intrastate Regulatory  
10 operations of Sprint/United Telephone Company of Missouri where my  
11 responsibilities included regulatory compliance, tariff filings, and earnings  
12 analysis for the Missouri company's intrastate operations. Since December 1994,  
13 I have set-up and directed a work group which performs cost of service studies for  
14 retail services, wholesale unbundled network elements cost studies, and state and  
15 federal Universal Service Fund cost studies. Over the last seven years, I have been  
16 charged with developing and implementing cost study methods which conform  
17 with Total Service Long Run Incremental Cost ("TSLRIC") and Total Element  
18 Long Run Incremental Cost ("TELRIC") methodologies. I am responsible for  
19 written and oral testimony, serving on industry work groups, and participating in  
20 technical conferences related to TSLRIC/TELRIC costing methodology, filing of  
21 studies within 18 individual states that comprise Sprint's Local Telephone  
22 Division (LTD) and providing cost expertise to Sprint's participation in regulatory  
23 cost dockets outside of the LTD territories.

24

25 Q. Have you previously testified before state regulatory commissions?

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1 A. Yes. I have testified before the Florida, Nevada, North Carolina, Texas, Kansas,  
2 Missouri, Georgia, and Wyoming regulatory commissions regarding  
3 TSLRIC/TELRIC cost matters.  
4

5 **Q. What is the purpose of your testimony?**

6 A. The purpose of my testimony is to support Sprint witness Dr. Brian Staihr's  
7 response to issue 5f, which states, "For each market, what is the appropriate cut-  
8 off for multiline DS-0 customers (where it is more economic to serve a multiline  
9 customer with a DS-1 loop)?" My testimony provides the calculations used to  
10 determine the economic crossover between provisioning DS-0 (voice grade) loops  
11 and DS-1 loops.  
12

13 **Q. Has Sprint developed an economic crossover analysis?**

14 A. Yes. Exhibit KWD-1, attached to my testimony, calculates the average economic  
15 crossover a competitive local exchange carrier (CLEC) would experience in  
16 serving the an analog customer in the territories of the three largest incumbent  
17 local exchange carriers (ILEC) within the state of Florida based on the number of  
18 analog voice lines used by the customer.

19 **Q. What is the appropriate cut-off for multiline DS-0 customers (where it is  
20 more economic to serve a multiline customer with a DS-1 loop)?**

21 A. The model results indicate that up to 12 DS-0s at a customer's location,  
22 purchasing individual loops is more cost effective than purchasing single DS-1.  
23

24 **Q. What are the cost components in the economic cost crossover model for the  
25 provision of service over a DS-1 facility?**

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1    A.    Our model includes the monthly recurring charges of the unbundled network  
2           element DS-1 loops, the unbundled network element non-recurring charges for  
3           DS-1 loops, and the monthly costs of a channel bank installed at the customer's  
4           premises used to multiplex multiple voice channels onto a DS-1 loop facility.

5

6    **Q.    What are the cost components in the economic cost crossover model for the**  
7           **provision of service over a DS-0 facility?**

8    A.    The model includes the monthly recurring charges of the unbundled network  
9           element DS-0 loops and the non-recurring charges for unbundled network element  
10          DS-0 loops. The non-recurring charges reflect the charges for the initial DS-0  
11          loop and each additional loop ordered.

12

13   **Q.    What are the sources of unbundled network element prices for the monthly**  
14          **recurring services and the non-recurring services?**

15   A.    All unbundled network element prices are Florida Commission approved from  
16          Docket No. 990649-TP. Order No. PSC-02-1311-FOF-TP was used for  
17          BellSouth's UNE prices, Order No. PSC-02-1574-FOF-TP was used for  
18          Verizon's UNE prices, and Order No. PSC-03-0058-FOF-TP was used for  
19          Sprint's UNE prices.

20

21   **Q.    What is the source of the access line data used to determine the weighted**  
22          **average UNE prices?**

23   A.    The access line data are from the HCPM adjusted with USAC lines in service.  
24          HCPM provided lines by wirecenter as of 2000. For each company in the study,  
25          the difference between the lines in HCPM and lines in USAC was applied to the



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1 wirecenter level line counts to determine a more current estimate of access lines  
2 for the studied ILECs.

3

4 **Q. What additional variables are included in the calculations?**

5 A. A weighted average cost of capital input is used for amortizing the non-recurring  
6 charges. The weighted average cost of capital is the same 12.26 percent that was  
7 supported by Dr. Staihr in Docket No. 990649-TP.

8

9 **Q. How are the non-recurring unbundled network element costs treated in the**  
10 **economic crossover analysis?**

11 A. The non-recurring unbundled network element charges for establishing DS-0 or  
12 DS-1 services are amortized over a 24 month period using Sprint's weighted cost  
13 of capital. For our modeling, we have assumed a 24 month average customer life.

14

15 **Q. How is the monthly cost of the channel bank at a DS-1 customer premises**  
16 **calculated?**

17 A. The monthly cost of the equipment is calculated by dividing the total material cost  
18 of the over the life of the asset, accounting for Sprint's cost of capital, nine year  
19 depreciation life, income tax, maintenance, and sales tax of 7 percent.

20

21 Material prices reflect the size of the channel bank and cards that would be  
22 installed at a customer premises capable of multiplexing one DS-1 into DS-0s.  
23 The material was amortized using Sprint's annual cost factors from Docket No.  
24 990649B-TP (except for the cost of capital which was changed to 12.26 percent as  
25 previously described). Labor related to the installation of the customer premises

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1 channel bank was amortized over 24 months.

2

3 **Q. How are these cost components used to calculate a state-wide average**  
4 **crossover between unbundled DS-0 and DS-1 loops?**

5 A. The model calculates the UNE provisioning costs of both DS-0 and DS-1  
6 facilities as described above for each central office in the state of Florida served  
7 by the largest LECs (Bellsouth, Verizon, and Sprint). A weighted average cost  
8 for each MRC and NRC is computed by multiplying the central office specific  
9 result by the percentage of access lines in that central office. The weighted  
10 average cost of a DS-1 loop is then divided by the weighted average cost of a DS-  
11 0 loop.

12

13 **Q. What is the economic crossover result produced in the model.**

14 A. The model results indicate that up to 12 DS-0s at a customer's location,  
15 purchasing individual loops is more cost effective than purchasing a single DS-1.  
16 Above 12 DS-0s, the DS-1 becomes the more cost effective means of providing  
17 service to the customer.

18

19 **Q. Does this conclude your testimony?**

20 A. Yes.

**TRO Economic Business Case**  
**DS0 to DS1 Cross Over**

State = Florida  
Company = State

A	B	C	D	E	F
Row	Description	DS1 + Channel Bank	DS0	Cross-Over DS0 Quantity	Cross-Over Rounded DS0 Quantity
10	Weighted Average				
11	MRC	\$178.28	\$17.14		
12	NRC - Ammortized	\$41.42	\$1.51		
13	Total	\$219.70	\$18.66	11.78	12
14					

**EXHIBIT 24**

Summary of Analog-to-DS1 Crossover Estimates

Averaging Method	Average Crossover	Standard Deviation
Simple Average	12.1	2.6
Average with High and Low Eliminated	11.7	1.4

State	Estimated Crossover	Methodology	Source
District of Columbia	21	AT&T	Direct Testimony of Robert J. Kirchberger and E. Christopher Nurse, Formal Case No. 1024, at 5, 50-55 (filed Jan. 12, 2004).
Pennsylvania	14	AT&T <sup>1</sup>	Direct Testimony of Robert J. Kirchberger and E. Christopher Nurse, Docket No. I-00030099 (filed Jan. 9, 2004).
Illinois	14	Sprint	Direct Testimony of Daniel R. Gordon, Docket No. 03-0595, at 2 (filed Jan. 20, 2004).
Kansas	13	AT&T	Direct Testimony of John Finnegan, Docket No. 03-GIMT-1063-GIT (filed Dec. 18, 2003).
Kentucky	13	Sprint	Rebuttal Testimony of Mark E. Argenbright, Case No. 2003-00379 (filed Apr. 2, 2004).
Texas	13	AT&T	Direct Testimony of Steven Turner, Docket No. 28607, at 45 (filed Feb. 9, 2003).
Florida	12	Sprint	Direct Testimony of Kent W. Dickerson, Docket 030851-TP (filed Dec. 4, 2003).
Louisiana	12	Sprint	Rebuttal Testimony of Mark E. Argenbright, Docket 27571 (filed Mar. 15, 2004).
New Jersey	12	AT&T	Direct Testimony of Robert J. Kirchberger and E. Christopher Nurse, BPU Docket TO030975, at 57 (Feb. 2, 2004).
Alabama	12	Sprint	Rebuttal Testimony of Mark E. Argenbright, Docket 29054-Phase II (filed Mar. 5, 2004).
Michigan	12	Sprint	Prefiled Direct Testimony of Daniel R. Gordon, Case No. U-13796, at 7 (filed Dec. 19, 2003).
Washington	12	AT&T	Rebuttal Testimony of Arleen M. Starr, Docket No. UT0033044, at 2 (Feb. 20, 2004).
North Carolina	10	Sprint	Rebuttal Testimony of Mark E. Argenbright, Docket P-100 Sub 133q (filed Feb. 16, 2004).
South Carolina	10	Sprint	Rebuttal Testimony of Mark E. Argenbright, Docket 2003-326-C (filed Mar. 12, 2004).
Tennessee	10	Sprint	Rebuttal Testimony of Mark E. Argenbright, Docket 03-00491 (filed Feb. 27, 2004).
Maryland	10	AT&T	Direct Testimony of Robert J. Kirchberger and E. Christopher Nurse, Case No. 8983, at 51 (filed Jan. 26, 2004).
Indiana	10	AT&T	Direct Testimony of Joseph Gillan, Cause No. 42500, at 9 (Apr. 2, 2004).
Missouri	10	Sprint	Direct Testimony of James M. Maples, Case No. TO-2004-0207, at 7 (filed Dec. 18, 2003).
Georgia	9	Sprint	Direct Testimony of Randy G. Farrar, Docket 17749-U (filed Dec. 23, 2003).

<sup>1</sup> AT&T's testimony estimates that the crossover is in the range of 14 to 16 lines. The table above and analysis only uses the lower of these estimates.

**BEFORE THE**  
**LOUISIANA PUBLIC SERVICE COMMISSION**

In Re: Louisiana Public Service Commission )  
Implementation of the requirements arising from the )  
Federal Communications Commission's Triennial ) **DOCKET NO. U-27571**  
Review Order, Order 03-0-36; Unbundled Local )  
Circuit Switching for Mass Market Customers and ) **Filed: March 15, 2004**  
Establishment of a batch cut migration process. )  
\_\_\_\_\_ )

**REBUTTAL TESTIMONY AND EXHIBITS OF**

**MARK E. ARGENBRIGHT**

**ON BEHALF OF**  
**AT&T COMMUNICATIONS OF THE SOUTH CENTRAL STATES, LLC**

1    **Q.    PLEASE STATE YOUR NAME AND BUSINESS ADDRESS.**

2    A.    My name is Mark E. Argenbright. My business address is 1200 Peachtree St. NE,  
3           Suite 8200, Atlanta, GA 30309.

4  
5    **Q.    BY WHOM ARE YOU EMPLOYED AND IN WHAT CAPACITY?**

6    A.    I am employed by AT&T Corp. and hold the position of District Manager, Law  
7           and State Government Affairs, providing support for AT&T's regulatory  
8           advocacy in the nine states that make up AT&T's Southern Region.

9  
10   **Q.    PLEASE SUMMARIZE YOUR TELECOMMUNICATIONS**  
11       **BACKGROUND AND EDUCATION.**

12   A.    I graduated from the University of Montana in 1980 and have a Bachelor of  
13           Science Degree in Business Administration. I have worked in the  
14           telecommunications industry for over 17 years with 15 of those years in the area  
15           of regulatory affairs. Prior to being employed by AT&T, I was employed by  
16           WorldCom, Inc from 1994 to 2002 with multiple responsibilities including  
17           development and coordination of various of the company's regulatory and public  
18           policy initiatives for the company's domestic operations. This included acting as a  
19           witness in support of such initiatives. Prior to that, I was employed by the  
20           Anchorage Telephone Utility (now known as Alaska Communications Systems)  
21           as a Senior Regulatory Analyst and American Network, Inc. as a Tariff Specialist.

22   **Q.    HAVE YOU PREVIOUSLY FILED TESTIMONY IN THIS**  
23       **PROCEEDING?**

24  
25   A.    No.

26   **Q.    WHAT IS THE PURPOSE OF YOUR TESTIMONY?**

1 A. To respond to the proposal by BellSouth witness Ms. Blake regarding the  
2 appropriate crossover point for use in delineating between mass market customers  
3 and enterprise customers in Louisiana and to provide an alternative proposal  
4 based on the general formula described by CompSouth witness Mr. Gillan.

5 **Q HOW IS YOUR TESTIMONY STRUCTURED?**

6 A. I will first address the BellSouth proposal and how it fails to consider the  
7 direction given by the FCC with regard to the calculation of a crossover point. I  
8 will then review the formula described by CompSouth's Mr. Gillan in his direct  
9 testimony. Consistent with this formula, I will then propose a more suitable  
10 crossover point. Finally, I will describe the calculation, which utilizes a model  
11 introduced by Sprint in the state of Florida for the purpose of calculating the  
12 crossover point, utilizing Louisiana specific inputs.

13  
14 **Q. AT PAGE 8, LINES 15 THROUGH 20, BELL SOUTH WITNESS BLAKE**  
15 **INDICATES THAT THE APPROPRIATE CROSSOVER POINT WITH**  
16 **WHICH TO DELINEATE BETWEEN "MASS MARKET" AND**  
17 **"ENTERPRISE" CUSTOMERS IS "THREE OR FEWER DSO LINES."**  
18 **DO YOU AGREE?**

19  
20 A. No. As explained in the direct testimony of CompSouth's Mr. Gillan, the  
21 calculation of a crossover results in establishment of the upper boundary of the  
22 mass market in terms of the number of voice lines a customer may have before  
23 the customer should be viewed as an enterprise customer. Ms. Blake's suggestion  
24 that a crossover point of three lines is appropriate fails to consider the FCC's



1 primary direction that a crossover calculation consider the point at which it is  
2 more economical for a customer to be served with a DS1 instead of multiple DS0  
3 loops.

4  
5 In fact Ms. Blake misquotes the FCC's Order in this regard. Citing to ¶497 of the  
6 TRO, Ms. Blake indicates that the FCC's direction is "to define the cross-over  
7 point as 'where it makes sense for the multi-line customer to be served via a DS1  
8 loop.'" The FCC's actual direction is clear when ¶497 is cited accurately:

9  
10 "This cross over point may be the point where it makes *economic* sense  
11 for a multi-line customer to be served via a DS1 loop." [emphasis added]  
12

13 Failure to consider the point at which it makes more "economic sense" to serve a  
14 customer with a DS1 rather than multiple DS0s does not comply with the  
15 direction given by the FCC.

16  
17 Q. IN MR. GILLAN'S DIRECT TESTIMONY, BEGINNING AT PAGE 26,  
18 LINE 7 THROUGH PAGE 27, LINE 5, HE DESCRIBES A GENERAL  
19 FORMULA WITH WHICH AN ECONOMIC CROSSOVER POINT  
20 COULD BE CALCULATED. PLEASE SUMMARIZE THIS FORMULA.

21  
22 A. CompSouth's witness Mr. Gillan proposes, and, as a member of CompSouth,  
23 AT&T supports, a "straightforward calculation" whereby the cost of a UNE DS1  
24 is compared to the cost of multiple UNE analog loops in order to make a  
25 determination as to when, in terms of the number of UNE analog loops, it is more  
26 economical to serve a customer with a DS1. The cost of a UNE DS1 must also

1 include the customer premise equipment that is required to utilize DS1 service as  
2 well as all the costs of non-recurring activities and installation of such equipment.

3

4 CompSouth's Mr. Gillan illustrates the calculation as follows:

5

$$6 \quad \text{Crossover} = \frac{(\text{CPE} + \text{UNE DS-1})}{\text{UNE Loop}}$$

7

8 The costs, recurring and non-recurring, associated with acquiring the UNE DS-1

9 and UNE Loop facilities from the incumbent must be included in the calculation.

10

11  
12 The use of such a formula will result in the determination of the number of analog  
13 lines at which it is more economical to serve a customer with a DS1, which is the  
14 crossover point. AT&T, as a member of CompSouth, supports CompSouth's  
15 proposed approach.

16

17 **Q. DOES COMPSOUTH'S WITNESS DISCUSS OTHER FACTORS THAT**  
18 **COULD BE APPROPRIATE TO CONSIDER IN THIS ANALYSIS?**

19

20 **A.** Yes. At page 26, lines 5 through 12, CompSouth's Mr. Gillan explains that the  
21 above formula could be made more complicated by including other costs that  
22 would be incurred with the use of UNE-L. "... (such as collocation and backhaul)  
23 that are not incurred to use UNE-P." AT&T agrees with CompSouth's Mr. Gillan  
24 that there are additional costs that could be added to the analysis however, as a  
25 member of CompSouth, AT&T supports the straightforward approach and  
26 formula proposed by CompSouth's Mr. Gillan.

1  
2 **Q. IN LOUISIANA, WHAT IS THE APPROPRIATE CROSSOVER FOR**  
3 **MULTI-LINE ANALOG LOOP CUSTOMERS WHERE IT BECOMES**  
4 **MORE ECONOMIC TO SERVE A MULTI-LINE CUSTOMER WITH A**  
5 **DS1?**

6  
7 A. Exhibit MEA-1, attached to my testimony, calculates the average economic  
8 crossover a competitive local provider would experience in serving an analog  
9 customer in the BellSouth territory within the state of Louisiana based on the  
10 number of analog voice lines used by the customer.

11  
12 The results of this calculation indicate that, up to 12 DS0s at a customer's  
13 location, purchasing individual loops is more cost effective or economic than  
14 purchasing a single DS1.

15  
16 **Q. WHAT IS THE SOURCE OF THIS CALCULATION?**  
17

18 A. Sprint Communications, in Florida, filed a model that calculated an economic  
19 crossover specific to the State of Florida.<sup>1</sup> This same model has been populated  
20 with some Louisiana specific inputs and now calculates a specific and reasonable  
21 economic crossover point for Louisiana, which is consistent with the economic  
22 crossover calculation proposed above.

23  
24 **Q. WHY DO YOU FIND SPRINT'S MODEL A REASONABLE METHOD**  
25 **FOR THE DETERMINATION OF THE ECONOMIC CROSSOVER**  
26 **POINT BETWEEN MASS MARKET AND ENTERPRISE CUSTOMERS?**

1  
2 A. Sprint is an established ILEC with significant experience in providing service to  
3 both multiple DS0 served customers as well as DS1 served customers. Their  
4 experience and related data provide a reasonable proxy for the circumstances that  
5 would be faced by a CLEC in Louisiana. Further, their model is consistent with  
6 the general calculation described by CompSouth witness Gillan in his direct  
7 testimony and summarized above.

8  
9 **Q. WHAT ARE THE COST COMPONENTS IN THE ECONOMIC COST**  
10 **CROSSOVER MODEL FOR THE PROVISION OF SERVICE OVER A**  
11 **DS1 FACILITY?**

12  
13 A. This model includes the monthly recurring charges of the unbundled network  
14 element DS1 loops, the unbundled network element non-recurring charges for  
15 DS1 loops, and the monthly costs of a channel bank installed at the customer's  
16 premises used to multiplex multiple voice channels onto a DS1 loop facility.

17  
18 **Q. WHAT ARE THE COST COMPONENTS IN THE ECONOMIC COST**  
19 **CROSSOVER MODEL FOR THE PROVISION OF SERVICE OVER A**  
20 **DS0 FACILITY?**

21  
22 A. The model includes the monthly recurring charges of the unbundled network  
23 element DS0 loops and the non-recurring charges for unbundled network element  
24 DS0 loops. The non-recurring charges reflect the charges for the initial DS0 loop  
25 and each additional loop ordered.

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<sup>1</sup> Direct Testimony of Kent W. Dickerson, Docket No. 030851-TP, filed December 4, 2003.

1  
2 **Q. WHAT ARE THE SOURCES OF UNBUNDLED NETWORK ELEMENT**  
3 **PRICES FOR THE MONTHLY RECURRING SERVICES AND THE**  
4 **NON-RECURRING SERVICES?**

5  
6 A. All unbundled network element prices are those approved by the Louisiana Public  
7 Service Commission in Docket No. U-24714 Subdocket A.

8  
9 **Q. WHAT IS THE SOURCE OF THE ACCESS LINE DATA USED TO**  
10 **DETERMINE THE WEIGHTED AVERAGE UNE PRICES?**

11  
12 A. The access line data are from the FCC's HCPM (Hybrid Cost Proxy Model) that  
13 provided lines by wire center as of 2000.

14  
15 **Q. WHAT ADDITIONAL VARIABLES ARE INCLUDED IN THE**  
16 **CALCULATIONS?**

17  
18 A. A weighted average cost of capital input is used for amortizing the non-recurring  
19 charges. This weighted average cost of capital is 13.07%. This utilizes the cost  
20 of capital calculated by the FCC in the recent Verizon-Virginia WorldCom  
21 Arbitration Order.<sup>2</sup>

22  
23 **Q. HOW ARE THE NON-RECURRING UNBUNDLED NETWORK**  
24 **ELEMENT COSTS TREATED IN THE ECONOMIC CROSSOVER**  
25 **ANALYSIS?**

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<sup>2</sup> CC Docket No. 00-218, In the Matter of Petition of WorldCom, Inc. Pursuant to Section 252(e)(5) of the Communications Act for Preemption of the Jurisdiction of the Virginia State Corporation

1  
2 A. The non-recurring unbundled network element charges for establishing DS0 or  
3 DS1 services are amortized over a 24 month period using the weighted cost of  
4 capital. In this model the assumption is a 24 month average customer life.

5  
6 **Q. HOW IS THE MONTHLY COST OF THE CHANNEL BANK AT A DS1**  
7 **CUSTOMER PREMISES CALCULATED?**

8  
9 A. The monthly cost of the equipment is calculated by dividing the total material cost  
10 over the life of the asset, accounting for the cost of capital, nine year depreciation  
11 life, income tax, maintenance, and sales tax of 7 percent.

12  
13 Material prices reflect the size of the channel bank and cards that would be  
14 installed at a customer premises capable of multiplexing one DS1 into DS0s. The  
15 material was then amortized. Labor related to the installation of the customer  
16 premises channel bank was amortized over 24 months.

17  
18 **Q. HOW ARE THESE COST COMPONENTS USED TO CALCULATE AN**  
19 **AVERAGE CROSSOVER BETWEEN UNBUNDLED DS0 AND DS1**  
20 **LOOPS WITHIN BELL SOUTH'S TERRITORY?**

21  
22 A. The Sprint model calculates the UNE provisioning costs of both DS0 and DS1  
23 facilities as described above for each central office in the state of Louisiana  
24 served by BellSouth. A weighted average cost for each MRC and NRC is  
25 computed by multiplying the central office specific result by the percentage of

1 access lines in that central office. The weighted average cost of a DS1 loop is  
2 then divided by the weighted average cost of a DS0 loop.

3  
4 **Q. WHAT IS THE ECONOMIC CROSSOVER RESULT PRODUCED IN**  
5 **THE MODEL?**

6  
7 A. The model results indicate that, for up to 12 DS0s at a customer's location,  
8 purchasing individual loops is more cost effective, or economic, than purchasing a  
9 single DS1. Above 12 DS0s, the DS1 becomes the more cost effective means of  
10 providing service to the customer.

11  
12 **Q. DOES THIS CONCLUDE YOUR TESTIMONY?**

13  
14 A. Yes.

**TRO Economic Business Case  
 DS0 to DS1 Cross Over**

State = LA  
 Company = BellSouth

AT&T Communications of the South Central States, LLC  
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A	B	C	D	E	F
Row	Description	DS1 + Channel Bank	DS0	Cross-Over DS0 Quantity	Cross-Over Rounded DS0 Quantity
10	Weighted Average				
11	MRC	\$167.65	\$17.03		
12	NRC - Ammortized	\$38.50	\$0.89		
13	Total	\$206.15	\$17.92	11.50	12
14					



1 Inputs

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3	<b>Assumed Term</b>	
4	Months - MRC	1
5	<b>Channel Bank (CB)</b>	
6	MRC per DS1	\$36.96
7	<b>Assumed Term</b>	
8	Months - NRC	24
9	<b>Cost of Capital</b>	
10		13.07%
11	<b>Add'l NRC DS0 Quantity</b>	
12	Number of DS0s	11

UNE DS0 Loop MRC Rates					
State	Zone	BS	ILEC	ILEC	
Louisiana	1	\$12.90	\$0.00	\$0.00	
	2	\$23.33	\$0.00	\$0.00	
	3	\$48.43	\$0.00	\$0.00	
	4	\$0.00	\$0.00	\$0.00	
Weighted Average		\$17.03			

UNE DS1 Loop MRC Rates					
State	Zone	BS	ILEC	ILEC	
Louisiana	1	\$85.70	\$0.00	\$0.00	
	2	\$194.96	\$0.00	\$0.00	
	3	\$491.94	\$0.00	\$0.00	
	4	\$0.00	\$0.00	\$0.00	
Weighted Average		\$167.65			

UNE DS0 Loop NRC Rates					
State	Description	BS	ILEC	ILEC	
Louisiana	NRC-First	\$36.54	\$0.00	\$0.00	
	NRC-Additional	\$16.87	\$0.00	\$0.00	
	S.O.-First	\$2.98	\$0.00	\$0.00	
Weighted Average		\$18.76			

UNE DS1 Loop NRC Rates					
State	Description	BS	ILEC	ILEC	
Louisiana	NRC-First	\$245.16	\$0.00	\$0.00	
	NRC-Channel Bank*	\$561.13	\$0.00	\$0.00	
	S.O.-First	\$2.98	\$0.00	\$0.00	
Weighted Average		\$809.27			

\* CLEC cost to install the channel bank at customer premises.